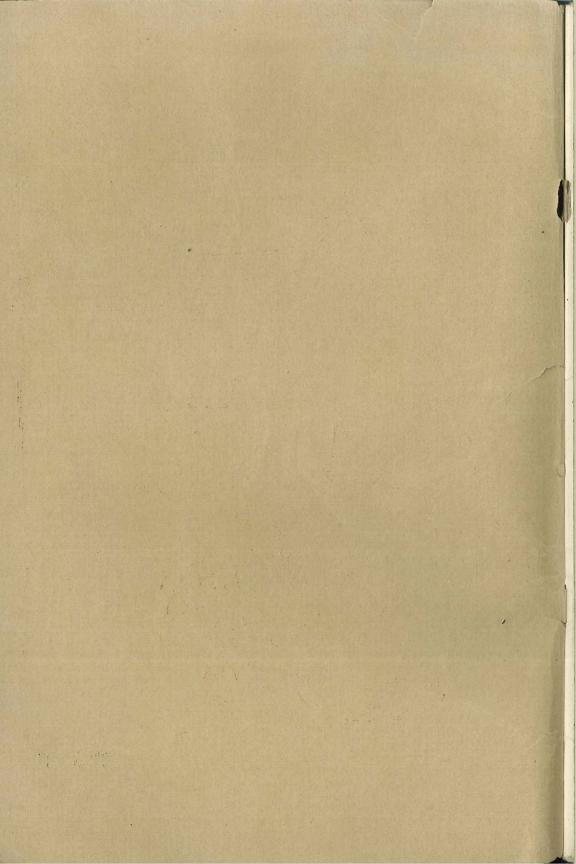


National Sheet Metal Roofing Company
339-345 Grand Street

JERSEY CITY, N. J., U. S. A.



(1921)

"MAKE A THATCH FOR THY ROOF"

A PRESENTMENT of THE MERITS of

METAL SHINGLES and METAL TILES

IN ATTRACTIVE FORM AND SHAPE

Manufactured by

National Sheet Metal Roofing Company

FACTORY

Numbers 339-345 Grand Street JERSEY CITY, NEW JERSEY Copyright 1921 by
NATIONAL SHEET METAL ROOFING COMPANY
Nos. 339-345 Grand Street
Jersey City, N. J.

FOREWORD

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PERFECT METAL ROOF is to-day obtainable. Its accomplishment is due to the late Mr. Chas. B. Cooper, a man of practical ideas, perseverance and genius, who in 1882, over thirty-eight years ago conceived the idea of Metal Shingles. At first only painted tin stamped into proper shape was used. Later in 1885, Mr. Cooper experimented with a zinc coating over the tin—popularly termed "galvanized iron." Each metal shingle was hand-dipped in a bath of purified, molten zinc. This same method is followed by us to this day and was THE FIRST successful rust-proof covering.

We were the Pioneers. Every article of merit is imitated, and we have had many imitators, but Walter's and Cooper's Shingles have retained their prestige as THE BEST. This prestige is the result of using honest material in the manufacture of our Metal Shingles, over thirty-eight years experience in the manufacture of this roofing as a specialty, and the constant effort to produce a lasting roofing material.

Roofs covered with our Shingles over thirty years ago are as good as when put on. Recently a roof of that age was taken off because the house was worn out and the same roof was put on a new house.

Indestructible Roofs of Beauty and Utility

The National Sheet Metal Roofing Company was the Pioneer in the manufacture of Metal Shingle Roofing material. Wise and practical men in 1882 saw the demand that there would be for a superior article of metal roofing, and formed this Company. Even in those days there was much dissatisfaction with the wood shingles, by reason of their inferior lasting quality, and inflammable nature, and a better roofing material was demanded. Neither did the old style standing seam or corrugated iron roof present the beauty and attractiveness that was desired for a better class of buildings, to say nothing of their poor lasting qualities in comparison with the results obtained from the same material applied to the roof in the form of a metal shingle. The making of wood shingles to stand the elements for longer than six to twelve years is almost an impossibility in this age. As we do not have the proper timber supply, sappy, cross grained, and poor wood enters into the manufacture of wood shingles, and a life of short duration is the result. A few years of storms and their usefulness is passed. So when the present well-known Walter's lock was invented in 1882, this company was formed to manufacture the Walter's Metal Shingles, and the sale of our goods has extended to every state in the Union and to various foreign countries. Our Walter's side lock has never been equalled or improved. It presents an absolutely impervious lock to moisture-rain, fog, dew, sleet, snow-and its construction enables it to withstand the contraction and expansion caused by excessive heat or cold. This roof cannot rattle, is easily applied and is self-locking. It is inexpensive and beautiful, for the metal is formed into various architectural designs easily and cheaply. Our duplication of the wonderfully attractive Spanish Tiling is an example.

So we have come to THE PERFECT METAL ROOF, beautiful and practical, as the result of this Company's endeavors.

Why Walter's and Cooper's Metal Shingles Are Best

Metal Shingles of our manufacture are the very best shingles you can obtain. Does not the fact that we are the Pioneer manufacturers of metal shingles, having begun the manufacture of this form of roofing in 1883, and the fact that we have devoted thirty-eight years to the manufacture of metal shingles, as a specialty, bear out this claim? Remember, we were the first in the field, and all of those who have followed have but imitated. We have kept abreast of the times, and from the experience gained in thirty-eight years of specializing in this one line, we are enabled to make a better shingle of greater wearing qualities than other less experienced manufacturers.

From the first (since 1882) we have insisted on HONEST material. We have not skimped in anything. The tin we use is the "1 C Prime Full Weight Roofing Tin," weighing 214 pounds per box of 112 sheets, each 20 x 28 inches in size—the best obtainable. This Charcoal Roofing Tin is the recognized standard material, and its use guarantees long wear, when properly applied. We also use 12, 14 and 16 ounce copper and No. 9 and 10 sheet zinc where this material is desired.

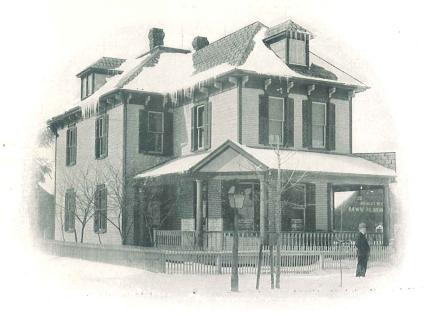
Every individual shingle is stamped out of this best material, and if it has the least flaw it is discarded. Then this perfect shingle stamped from this perfect material, is heavily coated AFTER stamping with either paint or molten zinc, as desired—unless the material be copper or zinc, when no coating is required.

It is very easy, as all know, to pretend that these best materials are used, and then skimp on some of them. Therefore

We FULLY GUARANTEE ALL MATERIAL AS UP TO THESE SPECIFICATIONS.

For over thirty-eight years we have made this broad statement, and not in one instance have we failed to fulfill our agreement. This has given the Walter's Shingle the lead among builders and architects, who, wishing to name a standard, specify our goods. This reputation has made our shingles known the world over as "The Shingles That Last!"

For ANY thing to LAST, it must be HONEST. That is WHY Walter's Metal Shingles, made by the originators of metal shingles, ARE the BEST. We started out with honest workmanship and material, and we have kept it up ever since. The thousands who have used our goods since 1882 can and do testify to this.



Bermudian, Pa. September 17, 1921.

NATIONAL SHEET METAL ROOFING Co., Jersey City. N. J.

Gentlemen:—It is a pleasure for me to state that your Genuine Re-dipped Galvanized Tin Shingles are the best shingles I know of. After 30 years of service, these shingles show no signs of rust. By reason of their lasting quality my orders for shingles this year have been greater than ever.

Very truly yours,

JACOB WILEY.

The House Wore Out, but the Roof was as Good as New

A remarkable test of Walter's Metal Shingles.

Placed in position thirty-two years before, they outlasted the house and were in such perfect condition that they were removed and placed on the NEW house—to probably outlast that one, too—for these Metal Shingles are practically indestructible.

Here is what the builder says of the roof, which was covered with our Standard Painted Tin Shingles.

Surely a true test of the wearing qualities of our Metal Shingles.

Glens Falls, N. Y., February 1, 1917.

NATIONAL SHEET METAL ROOFING Co., 339 Grand Street,

Jersey City. N. J.

Gentlemen:—I am just tearing down a bungalow that was built on Lake George 32 years ago which was covered with your 14 x 20 Standard painted tin shingles. These shingles have been on this bungalow for 32 years and are, as far as I can see, as good as new at the present time.

The bungalow is to be rebuilt in another location and we are going to cover it with the shingles taken from the roof of the old bungalow and which have given 32 years of service.

I will need a few additional shingles for the new roof and wish to know if you are still making these shingles and can furnish same to me.

Yours very truly,

FRANK D. MOREHOUSE.



Residence in Jersey City, showing Walter's Standard Shingles covering a circular tower.



Making Galvanized Metal Shingles

The best quality of Roofing Tin carries on its surface a coating of 75 per cent. lead and 25 per cent. pure tin, approximately two and two-thirds pounds of this being deposited on each square (100 square feet). Were there no wear or bending of these sheets of tin, this coating would protect it from rust, but such is obviously never the case.

Pondering over a remedy, Charles B. Cooper in 1885 tested dipping the stamped tin shingles in molten zinc. The result (now called "galvanized"), was marvelous. The tin sheet absorbed the hot zinc forming an amalgamation with the tin coating, and from 20 to 22 pounds per square clung to it, forming an absolute protection about eight times as heavy as the original coating. Each one of our shingles is individually dipped, thus filling every crevice and coating every part.

As can be imagined, this is somewhat a slow and costly process, and there is NO mechanical method of coating the metal that will accomplish the same result. Therefore, we continue to hand-dip each individual tin shingle, permitting it to absorb as much zinc as will adhere to it, and this is what gives such long life to roofs covered with Walter's and Cooper's Metal Shingles.

We are not satisfied with the zinc "spelter" as it comes to us, though it is supposed to be perfectly pure and free from any mixture of foreign material. So we purify the zinc after melting until we have a mixture that is as near pure as it is possible to obtain.

Thirty Years Without Any Repairing

The very first roofs covered with these Galvanized Tin Metal Shingles invented by Mr. Cooper are as good to-day as they were when laid over a quarter of a century ago. Not a penny has been spent in their repair. No painting, no re-galvanizing, no re-nailing. This is solely because of the excellence of the material and method used in their manufacture. Some of the later imitators of the Cooper Method stamp their Shingles and Tiles from sheets that are galvanized before the Shingle or Tile is stamped or formed. This leaves raw edges, cracks and abrasions of the zinc coating and shingles made in this manner quickly rust

and decay.

The galvanized sheets from which these shingles are stamped are termed "Tight Coat." The significance of "Tight Coat" is misleading. What it does mean is that these sheets are passed through rollers, after coming from the galvanizing kettle, for the purpose of squeezing from the base plate every particle of zinc that can be removed, and also for completing by compression while hot the amalgamation between the thin zinc coating and the base plate. Zinc naturally is a brittle metal, possessing very little flexibility, and inclined to break or crack when bent at a sharp angle. An extremely light zinc coated sheet will stand the various bends required in stamping the shingle, with slight cracks or abrasions of the coating of zinc. A sheet having the ordinary coating of commercial galvanized sheets will not stand the stamping process. For the purpose of obtaining a cheap shingle the so-called "Tight Coat" is used. Test the coating of zinc on our Genuine re-dipped Galvanized Tin Shingles in comparison with the so-called and misleading "Tight Coat."

All Walter's Shingles are hand dipped in HOT metal, and all the rich, heavy zinc that will adhere is allowed to do so. This puts so heavy a coat over the original iron and tin that this base is NEVER exposed in any part, so NO RUST can occur. Exposed to all kinds of weather conditions in any climate for thirty years, these HONEST little sheets of zinc coated tin remain just as good as they were when first put on the roof. These are FACTS. Can you ask anything better as conclusive

proof of the excellence of our goods?

Walter's Painted Tin Shingles

Walter's PAINTED Tin Shingles are not quite so expensive as the galvanized shingles just described. They are good shingles—far better than wood—but NOT as lasting as those zinc coated.

Paint cannot be applied so it will be as protective to the tin as zinc. But we guarantee that our painted tin shingles will out-wear those of

any other make, because the same principles apply to their preparation as to the galvanized goods. WE USE HONEST PAINT—that is the entire secret!



RESIDENCE OF HENRY G. PROPHETT, BRIDGEWATER, MASS. Covered in 1887 with Walter's Standard Painted Tin Shingles.

Bridgewater, Mass., September 26, 1921.

NATIONAL SHEET METAL ROOFING Co., Jersey City. N. J.

Gentlemen:—Your letter is received and in reply would state that it is hard to say too much about the superior quality of your Walter's Metal Shingles. I have handled the Walter's Metal Shingles for the past thirty-four years. During this time I have handled thousands of squares of these goods. Seventeen of my own buildings are covered with these shingles, including my own residence. My residence was covered with these shingles thirty-four years ago, and to all appearances they look good for another thirty-four.

Very truly yours,

HENRY G. PROPHETT.

Yardville, N. J., September 16. 1921.

NATIONAL SHEET METAL ROOFING Co., Jersey City. N. J.

Gentlemen:—Please quote me prices on your Sheet Metal Shingles. I have a building at Milton, Del., which I covered with your Painted Tin Shingles in 1884. A short while ago I examined this roof and, to my surprise, it looked just as good as when it was put on 37 years ago.

Very truly yours,

WM. E. CAREY.



It is easy and cheap to put on paint that is full of inferior oxide of iron, benzine, varnish and such worthless material—worthless for use on a roof. We buy the best pigment obtainable—the "Prince Metallic"—grind it ourselves in pure boiled linseed oil, then add more boiled linseed oil and a little turpentine to get to the proper consistency for application. That is ALL that there is in the paint we use and it is all that is needed. It will not scale off from the metal, and as long as it remains, is a perfect protection from all kinds of weather wear.

The Walter's and Cooper's Painted Tin Shingles are heavily coated with this GOOD paint on both sides in the beginning, as shown. They are dried without artificial heat—in the open. This takes about forty-eight hours. They come out well dried and well covered, ready for shipment. When you see a shingle of some other make with a bright, glossy surface, beware of it. The pretty gloss is given by cheap varnish, but the solid pigment is lacking, and the varnish will scale quickly. After a month's exposure, it is almost impossible to scratch the paint off a Walter's Shingle.

If you cover your roof with a coat of this paint (which we supply at cost), just as soon as laid, these Painted Tin Shingles will outlast three or four wood shingle roofs.



Middle Hope, New York, May 17, 1916.

NATIONAL SHEET METAL ROOFING Co., 339 Grand Street. Jersey City. N. J.

Gentlemen:—Enclosed find check in payment of 8 square of 14×20 Walter's Standard painted tin shingles.

We have a roof on our house which was put on in 1885, 31 years ago, and the roof looks to be almost as good as when it was put on.

Very truly yours,

W. P. WESTLAKE.

The Care of a Painted Tin Roof

A roof carefully covered with Walter's Painted Tin Shingles will outlast the ordinary building, if it is treated with care and consideration. As soon as laid, put on a coat of GOOD paint, with mineral pigment and linseed oil solvent. If you can't find such a paint, we will supply it, although we do not make a specialty of selling paint.

Watch all the points where there is extra wear or strain. In damp climates, like the seashore, the roof will need to be re-paintd oftener than in a dry climate—about every three years. In ordinary climates, every four years.

But this all depends on the QUALITY of the paint you use. You will find it cheaper to pay MORE for your paint and not put it on so often. That is the secret of OUR success in this business. We use ONLY THE BEST of every kind of material which goes into the making of our Metal Shingles, and the result is a reputation that LASTS—as well as roofs that last.

Remember that these shingles are all painted in the beginning on the UNDER side as well as the outer, and this preserves them from any moisture that may collect from "sweating" or condensation underneath. This is not apt to be much, as there is a constant circulation of air under our shingles owing to their peculiar construction—one of our patented features.

Metal Shingles Over Old Wood Shingles

ANY of our styles of Metal Shingles can be laid right over the old roof of wood shingles, if desired, without removing any of the wood shingles.

This is a great saving in time and also has the advantage of protecting the house from cold and heat, as, by our method of construction, there is constant distribution of air under the metal, between it and the wood, providing for the ventilation of the underside of our metal shingles.

It is almost as big a task to rip off the old shingle roof as it is to apply the new metal roof, and this can be avoided. It requires a little care to lay the metal shingles over the old wooden ones. The nails should be at least one inch and three-quarter, No. 13 barbed wire, to go through the old wood shingles into the boards or slats beneath the same. The 14×20 size of metal shingle is the better size to use, as they are large enough to cover the inequalities of the old roof.

On page 15 is shown a picture of a roof being laid in this manner, over old wood shingles. Another advantage of this method is that one does not need to fill in the blank spaces in the roof sheathing, as would be necessary were the old shingles removed.



BARN NEAR WEST COXSACKIE, N. Y.

Covered with Walter's 14 x 20 Standard Galvanized Re-Dipped Tin Shingles.
Said to be the Second Largest Barn in the State of New York, and
Required About 13,000 Square Feet for Covering Same.

West Coxsackie, N. Y., February 6, 1921.

NATIONAL SHEET METAL ROOFING Co., Jersey City. N. J.

Dear Sirs:—Replying to your communication of February 6th, I wish to advise that I have covered a great many houses, and some large barns, in this section. with your Re-dipped Galvanized Tin Shingles. I am sending to you a photograph of what is said to be the second largest barn in the State of New York, owned by the Rev. Louis Lapman, and covered with your 14 x 20 Standard Galvanized Re-dipped Tin Shingles. Many of these roofs I have put on over the old wood shingles. I have worked at the tinner's trade for forty-one years, and I think there is no better goods than yours.

Very truly yours,

FRANK TREMMEL & SON.

Edmeston, N. Y., September 15, 1921.

NATIONAL SHEET METAL ROOFING Co., Jersey City. N. J.

Gentlemen:—We have used many different kinds of roofing on our buildings and find that Walter's Galvanized Shingles are the most satisfactory. A large percentage of the metal roofs in this section are Walter's and, to my knowledge, many have been on over thirty years and in not a single case has a roof been reshingled. Many of these roofs are put on over the old wood shingles, which seems to be very satisfactory.

Very truly yours,

C. A. TALBOT.

By thus covering the old roof with the new metal roofing, all danger of a wetting is obviated during the process of laying. Then it is obviously much cheaper, warmer, cooler and better in every way. By using the large metal shingles and proper size nails (the one and three-quarter nail will be found best) no difficulty whatever will be experienced. And much dirt and "muss" is avoided, as well as labor saved.



Copper Shingles

The most beautiful as well as most desirable form in which our Metal Shingles are made is in COPPER. This gives a roof that is the lightest, strongest and most durable in the world.

Copper needs no painting or galvanizing. It is of itself indestructible. Gradually it turns that coppery-green which so perfectly harmonizes with and blends into almost any color scheme surrounding it. A copper roof is a beautiful roof—always. By reason of its cost, it is adapted for use only on the best grade of buildings constructed. It will outlast any building on which it is placed and never requires repairs of any kind.

The objection to copper as a roofing material has always been the fact that it is very susceptible to extremes of heat or cold, contracting and expanding to a remarkable degree. In a plain, single-sheet copper roof, this variation often cracks the soldered seams and forms leakable sections that are hard to remedy. But with our interlocking method all this is obviated.

One of the chief points of our Metal Shingles is that which permits ANY degree of expansion or contraction in our Metal Shingles without danger of leakage. On another page we take this matter up in detail. The Walter's and Cooper's Copper Shingles can contract or expand as much as they please and NO leak will appear and no harm of any kind will be done to the roof. This we absolutely guarantee and will replace any roof which does not fulfill this guarantee.

So, if you really wish the VERY BEST roof that can possibly be put on your building, use Copper Shingles in some one of the attractive forms in which they are made.

In the following pages will be found illustrations of designs.

Ogdensburg, N. Y., April 15, 1921.

NATIONAL SHEET METAL ROOFING Co., Jersey City. N. J.

Gentlemen:—Thirty-six years ago I built my home and covered it with your 10×14 Standard painted tin shingles. It was the first roof of this kind in this section. Today, this roof is in fine condition and there has never been a leak. It looks as though it would last for many years more.

There were a number of other roofs of these shingles put on in this section about that time, and they are all in fine shape at the present time.

Will you please send me some samples to show to my friends, also catalog and prices.

Very truly yours,

JOHN MORRIS.

Sheet Zinc Shingles

Zinc has long been recognized as one of the most durable and lasting materials for roofing purposes.

Zinc has been used on many of the better class of buildings erected in France, Belgium, Germany and other parts of Europe for many years and from authentic reports received has given splendid satisfaction.

We know of its qualities as a rust resisting metal from the splendid service it gives when applied as a coating to iron and steel sheets in the form of what is commercially termed "Galvanized Iron." We are safe in assuming, if such results are obtained when applied as a coating, how much more lasting zinc will prove when used in pure sheets of a weight many times heavier than the coating applied to iron or steel.

While the lasting qualities of sheet zinc have been recognized by the sheet metal trade in this country, it has not come into general use in the past by reason of its known susceptibility to contraction and expansion. Zinc will expand approximately one-quarter of an inch in 10 feet between minus 30° and 100° Fahrenheit.

When applied in the form of sheets soldered together this expansion is a serious question as the strain on the soldered seams is very great and frequently cause cracks in the sheets from buckles.

If you will examine the manner in which our metal shingles and tiles are fastened or locked together, you will find there is ample provision for contraction and expansion of the metal and even if the expansive qualities of zinc were several times greater than it actually is, there would be no possible danger from this cause.

We advise the use of No. 9 Sheet Zinc, weighing 67 pounds to the 100 square feet. Our judgment is that this gauge of sheet zinc is of sufficient weight and thickness to make a lasting roof. If desired, we will be glad to quote on any gauge that may be required.

Full size samples of zinc shingles will be mailed upon application.

Guaranteed as Represented

Our Shingles, Tiles and Roofing Sundries are guaranteed to be of quality and construction as represented. We extend to our customers the privilege of returning to us any goods found to be not as represented.

You buy **protected** by the following **Guarantee**, a copy of which is enclosed with each square of goods:

GUARANTEE

THIS BOX CONTAINS ONE SQUARE - 100 SQ. FT .-

OF WALTER'S AND COOPER'S SHEET METAL SHINGLES

Made from I. C. Full Weight Roofing Tin, painted or galvanized after stamping. Wind, Weather, Fire and Wear Proof. The Best of Metal Shingles and Tiles Manufactured.

All of our Shingles and Tiles are guaranteed perfect. If defective Shingles are found herein, DO NOT UNDER ANY CIRCUMSTANCES USE THEM. Return them to us and we will issue a credit and pay carriage both ways. Give names of handlers as shown. ALL CLAIMS UNDER THIS GUARANTEE MUST BE MADE WITHIN 60 DAYS FROM DATE OF INVOICE.

Galvanizer	· ·
Painter	
Packer	
Inspector	

NATIONAL SHEET METAL ROOFING CO.

339-345 Grand Street, Jersey City, N. J.

Do you think we would make this offer if our goods were not as represented? We are so certain that you will be satisfied with our goods when you receive them that we are willing to extend to you the privilege of returning them to us at our expense, and to have your money refunded to you if you are not **perfectly** satisfied with what you have bought. Send them back at our expense and get your money, if not RIGHT.

Lightness of Walter's and Cooper's Metal Shingles



The Walter's and Cooper's Metal Shingles are the LIGHTEST roof covering that is substantial and wear-proof on the market. This is a very great consideration. Architects appreciate this feature, for it enables them to gauge with exactitude the timber strength of the roof and its supports. A distinct economy results to the person paying the construction bills.

Slate is wear-proof—until it CRACKS or blows off—but it is very heavy and

requires an enormously strong construction to simply keep the slate roof up! If this is not absolutely rigid, the slates will crack wherever a little sagging of the roof occurs. And once a slate roof begins to crack, the repair man is a constant visitor.

Wood shingles weigh about 400 lbs. to the hundred square feet, slate above 700 lbs., and our heaviest shingles (the galvanized) 96 lbs.! Certainly a difference worth considerable thought.

Slate, tile and tar roofs are very heavy, as the following table of weights of roofing material will show:

Weight per Square (100 Square Feet)

		-				
Tile (shingle) vitrified .					1800	
Tile (Spanish) ".					850	
Slate, 3-16 inch, good grade					700	
Four-Ply Slag					500	
Three-Ply Slag ,						
Shingles, spruce and pine					400	
Tin. IC thickness, standing se	am	_:.			65	lbs.
Walter's and Cooper's Galvan	ized	Shing	les		96	lbs.

Walter's Galvanized Shingles 96-lbs.

So the argument is all in favor of the Walter's and Cooper's Metal Shingle, even if they were to cost more—which they do NOT.

If your architect and builder understand from the beginning that you will use Walter's or Cooper's Metal Shingles, their estimates for the construction of your building, no matter of what design, will be much less than when you specify wood or slate or clay tile. Lighter timbering is needed and less firm construction of the roof supports. And the metal shingles—if they be WALTER'S or COOPER'S—are far cheaper of themselves.

Richfield Springs, N. Y., September 21, 1921.

NATIONAL SHEET METAL ROOFING Co., Jersey City. N. J.

Gentlemen:—We are pioneers in this section in selling the Walter's Metal Shingles. The first building in this town covered was our High School in 1886. The roof was covered with 10 x 14 Standard Painted Tin Shingles and to all appearances, they are as good today as when applied to the building. This roof has never leaked or caused any trouble in anyway.

Very truly yours,

BUCHANAN HARDWARE COMPANY.

Rockledge. Fla., September 19, 1921.

NATIONAL SHEET METAL ROOFING Co., Jersey City. N. J.

Gentlemen:—During the past fifteen years, I have used numerous makes of metal shingles, but the shingles that have stood the test in this section are the Walter's Re-dipped Galvanized Tin Shingles. I have covered over 50 buildings in Brevard County, Fla., and have yet to find any dissatisfaction with them. I strongly advocate the Walter's Re-dipped Galvanized Tin Shingles whenever the opportunity offers.

Very truly yours,

ALBERT H. SMITH.

Jamesport, L. I., September 19, 1921.

NATIONAL SHEET METAL ROOFING Co., Jersey City. N. J.

Gentlemen:—I have used your Genuine Re-dipped Galvanized Tin Shingles for the past 27 years. Many of my orders for shingles have been for use in covering old roofs. During this time they have given entire satisfaction.

Very truly yours,

THEODORE TERRY.

No Rattle to the Walter's and Cooper's Metal Shingles



The rattling and buckling of the old-time tin roof during a heavy wind storm is annoying to many people—especially to the man or woman with nerves. Lying awake for hours listening to this rattling has condemned many a tin roof applied in the old manner. It is not necessary to put up with this noise and the ugly flat appearance of a tin roof which costs fully as much as the modern Walter's or Cooper's Metal Shingles. These cannot rattle as there is abundant free circulation of air under them at all times, owing to their improved construction. Each metal shingle is

rigid and firm, and lies close and stays upon the sheathing. No more rattle to them than to slate or wood shingles.

A Walter's or Cooper's Roof is a Cool Roof

Then that other objection to a "tin" roof is overcome by the Walter's or Cooper's Metal Shingle—excessive heat in summer. The sun pouring down upon a tin roof—the old-fashioned kind—heats the rooms under it to an uncomfortable degree. By the use of our Shingles this is avoided, as there is always plenty of air between the metal and the sheathing, constantly in circulation. This also prevents any condensation of moisture on the under side of the metal.

For long years we experimented on the best way in which to make a roof that would keep out the rain and snow and at the same time admit air freely under it. This has been done and is one of the reasons why our goods find such ready sale to "those who know."

All the many objections to a tin roof have been overcome by the Walter's and Cooper's Metal Shingle, and we present to you to-day the perfected tin roof, with the tin so covered as to be indestructible and all danger of rattling and excessive heat removed.

A Fire-Proof Roof



In most modern cities, no roof that is not fire-proof is permitted—least of all the dangerous wooden shingle roof. This is proper, for most of the huge conflagrations spread by embers dropping on inflammable roofs. Every house should be thus protected, whether in a city or not. Particularly should this be so in the country where fire fighters are scarce.

The Walter's or Cooper's Metal Shingle roof is absolutely fire-proof. Nowhere on it can fire start. Even with a fierce fire raging



Howell, Mich., September 17, 1921.

NATIONAL SHEET METAL ROOFING Co., Jersey City. N. J.

Gentlemen:—I have a number of buildings that I have covered with your Walter's Tin Shingles. There are five houses in this town that were covered with the Walter's Tin Shingles 35 years ago and are in first class condition today. I have applied both your Painted Tin and Genuine Re-dipped Galvanized Shingles on many houses, churches, barns and garages in this section and they have proven satisfactory in every case. I am pleased to recommend them as the best shingles on the market.

Very truly yours,

JOSEPH A. FRANK.

beneath, the roof is safe and will remain almost intact to the end—as is abundantly proven by many incidents.

Furthermore, this roof is the best protection from lightning possible, for even should lightning strike a house thus roofed, the fluid scatters over the whole surface and descends by the metal gutters and rain drains to the ground where it is dissipated. There is always absolute safety where the deadly fluid can thus be scattered and no fire can result because there is nothing on the roof to burn.

This quality of fire safety helps the pocket, too, for one can obtain more insurance for less money when the examiner finds your buildings reofed with Walter's or Cooper's Metal Shingles. This is really a considerable saving, especially in localities where the fire protection is limited or non-existent. Even in the city the insurance rate on buildings with our roofs is far less than on buildings not thus protected.

And WHAT a comfort it is to KNOW that you don't have to worry about "sparks" every time a chimney burns out, or some neighbor's house catches on fire! YOU are safe, anyway. All the sparks in town could fall on your roof and no harm done.

Sussex, N. J., September 21, 1921.

NATIONAL SHEET METAL ROOFING Co., Jersey City, N. J.

Gentlemen:—We wish to advise that we have now been handling your Genuine Re-dipped Galvanized Tin Shingles for a period of about 20 years and during this time they have given good satisfaction to our customers. They make a roof light in weight, have proven very durable and do not require a skilled mechanic to lay them. We have found that any man who is handy with tools can lay them satisfactorily.

Very truly yours,

DECKER & SIMMONS.





The "Walter's" and "Cooper's Lock" were the pioneers in method of fastening metal shingles to one another, just as the "Cooper's Metal Shingle" and the "Walter's Metal Shingle" were the first to prove practical. Not only must the side lock keep the shingle from rattling and lifting even in a hurrican, but it must absolutely prevent ANY moisture from entering under this lock.

Look at the construction of the Improved Cooper's Locks, as shown by the diagrams on page 40, and you will see that the peculiar

form of the hook and corrugations make it impossible for rain or snow or any form of moisture to penetrate beneath it. There is an interior gutter which will carry off any slight moisture that might work under the hook. Tests of a quarter of a century with this lock have shown its reliability and storm-proof qualities.

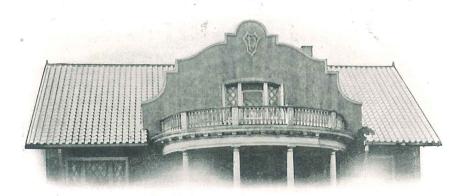
Furthermore, the construction of these two locks not only allows full expansion of the metal shingle but free circulation of air between the shingles and the wooden sheathing, so that there is NEVER any accumulation of condensation (moisture) on the under side of the shingles.

This is the guarantee that these Metal Shingles of our manufacture are in every respect MOISTURE PROOF, and we are safe in thus guaranteeing them, for they have been fully tested for many years under all possible conditions.

The Walter's Lock requires double the amount of material to make that other locks need, and consequently cost us more to produce, but inasmuch as the value of the roof depends entirely upon the proper locking of the shingles together, we are content, as we know that in our Walter's Lock we have control of the BEST METAL SHINGES MADE.



First Methodist Church, Amory. Miss. Covered with Cooper's Spanish Tile.



RESIDENCE AT HIGHWOOD PARK, N. J. Covered with Cooper's Spanish Tile.

Springfield, Mass., September 16, 1921.

NATIONAL SHEET METAL ROOFING Co., Jersey City, N. J.

Gentlemen:—We have now been using the Walter's and Cooper's Metal Shingles for about 10 years and they have given splendid satisfaction. We know of many roofs in Springfield and vicinity that were put on over 25 years ago and we have yet to hear of a single instance where they have proven unsatisfactory.

Very truly yours,

J. D. BUSBY CO.



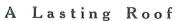
Scio, New York, September 26 1921.

NATIONAL SHEET METAL ROOFING Co., Jersey City, N. J.

Gentlemen:—For the past 36 years I have been using your shingles and during this time have never had a roof go bad. At the present time I have many contracts to put on Walter's and Cooper's Genuine Re-dipped Galvanized Tin Shingles. The Walter's and Cooper's Metal Shingles give the best satisfaction in this section.

Very truly yours,

A. A. BABCOCK.





As has been already set forth, Walter's and Cooper's Metal Shingles LAST because of the material used in their construction, and also because of the fact that allowance has been made for all expansion and contraction of the metal due to extremes of heat or cold.

Either the Walter's Patent Expansion Lock, or the Improved Cooper's Lock, will expand or contract without drawing the

nails or disarranging the shingles or tiles in the least particular.

A glance at this construction will show even the non-expert that this is true. Being fastened only on one side, with the locks so placed as not to bind no matter what the expansion, these metal plates can grow large or small as suits them, without danger to the roof.

In very cold or very hot climates the Walter's or Cooper's Lock, under NO circumstances is affected by climatic changes, while at the same time forming a perfect protection against all forms of storm. Even in the terrible hurricanes of the tropics, these Metal Shingles do not become loosened and do not rattle, while the fiercest storm cannot enter.

We challenge comparison with any roof made as to LASTING qualities. This makes the Walter's roof the economical roof, for with the roof protected constantly, the life of the building is doubled.

A Beautiful Roof



It is as easy for you to have a beautiful roof, harmonizing with the architecture of your building, as one that produces an ugly and unsightly appearance. It is a selection that rests with you entirely. We present to you for your selection various designs of our Metal Shingles, Flat Tiles, and Spanish Tiles, adapted to every style of architecture, from which to make your selection.

So, while a roof is designed primarily to shut out the storm and the heat of the sun, it is not necessary to make that roof ugly and lacking in all harmony and beauty. It is as easy to stamp out our sheets of tin into forms of artistic designs as to make them into designs lacking in harmony and taste, and we have evolved many beautiful designs that blend nicely for decorative work.

For certain forms of architecture there is nothing so attractive as the tile which the old Franciscan monks used on their mission churches and dwellings on the Pacific Coast. This Spanish Tile was made of

the red clay of that section and is very decorative. We have duplicated it in metal, which gives all the beauty without the weight and fragile quality.

Study the nine beautiful designs which will be found in detail on succeeding pages and realize what it would mean to have a roof covered with a selection from them. Combinations can be made which will be of surprising beauty. Nothing adds more to any structure than a fine roof. And nothing makes it look more shabby than a warped shingle or a slate askew. It is like a man otherwise well dressed who has on a hat of some past vintage.

With the Walter's or Cooper's Metal Shingles you can have a roof of beauty at no additional cost. Worth while?







HOLY CROSS CHURCH, JERSEY CITY.

Covered with Walter's Standard Painted Tin Shingles in 1892.

McLean, Va., September 19, 1921,

NATIONAL SHEET METAL ROOFING Co., Jersey City, N. J.

Gentlemen:—For the past twenty years I have used the Walter's and Cooper's Genuine Re-dipped Galvanized and Painted Tin Shingles and they have never failed in this time to give satisfaction. For durability and service, there are no better shingles made. It is a pleasure to give my testimony as to their qualities.

Very truly yours,

W. A. CLARKE.

THEREFORE

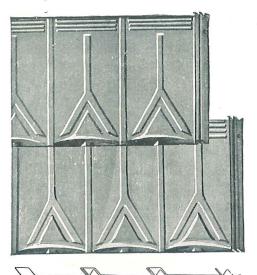
Not only our own belief, but that of thousands of users of the Walter's and Cooper's Metal Shingles and Tiles for nearly thirty-eight years is that WE HAVE PROVEN OUR CASE, and have at your disposal the very BEST roofing material ever devised. We guarantee the following seven points relative to them to be true:

- 1.—A storm and wind-proof roof, which will give perfect protection against the elements and give double the service of ordinary metal roofs.
- 2.—The strongest metal roof in the world, which is attractive, ready to be applied and does not require skilled labor to do so.
- 3.—A roofing requiring no soldering pot, mallets, seamers or tongs, and in which the expansion and contraction are provided for in each separate shingle.
- 4.—A roof so perfectly ventilated that rust will not occur on the under side, having one-sixth the weight of slate, one-fourth of wood, and requiring lighter frame work.
- 5.—A roof more durable and ornamental than it is possible to make a roof put on in the old flat lock or standing seam style.
- 6.—A roof that is fire-proof. Houses covered with them are accepted by all fire insurance companies at a less rate than houses covered with combustible materials.
- 7.—A roof that will last longer without repairs than any covered with wood or slate, and consequently prevents mottled or cracked ceilings and the decay of rafters and roof boards, caused by frequent leakages.

On the following eight pages we show the nine forms and designs of shingles and tiles which we manufacture, indicating how combinations may be made of several designs on the same roof, etc.

Walter's Standard Shingles

Our Walter's Standard Shingle was the first practical Metal Shingle to be put on the market. The fact that the demand for this Shingle has



Walter's Standard Shingle with sectional view, showing lock.

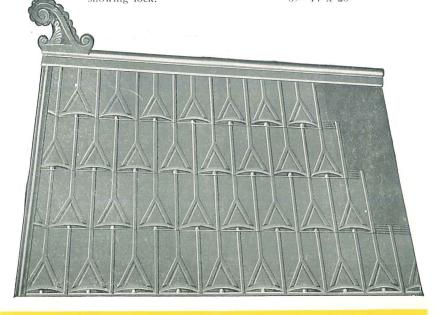
steadily increased for the past thirty-eight years is sufficient evidence of the satisfaction that this Shingle has given.

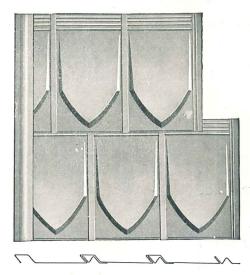
This Shingle has the Walter's protected expanding lock and is of ornamental design. Beyond doubt the easiest Metal Shingle to apply that is made.

Made in 7 x 10 size
" 10 x 14 "
" 14 x 20 "

300— 7 x 10 to the square

148—10 x 14 " "
69—14 x 20 " "





Walter's Excelsior Tile.

Excelsior Tile

A very bold and artistic Tile especially intended for the better class of residences where a handsome roof is desired.

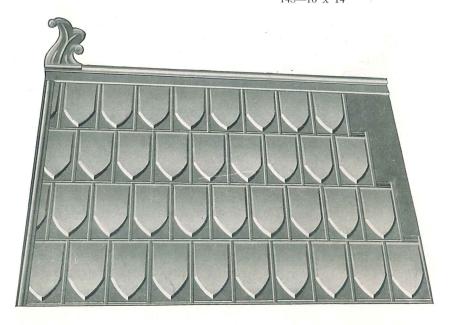
It is a most perfectly constructed flat metal Tile, in fact for fine work no Tiles can be compared to the Excelsior and the Octagon fastened with the Walter's patent lock.

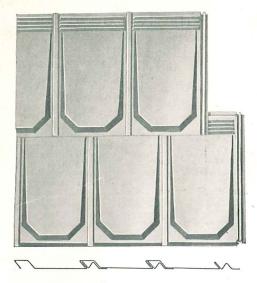
Made in 7 x 10 size

" 10 x 14 "

300— 7 x 10 to the square

148—10 x 14 " "



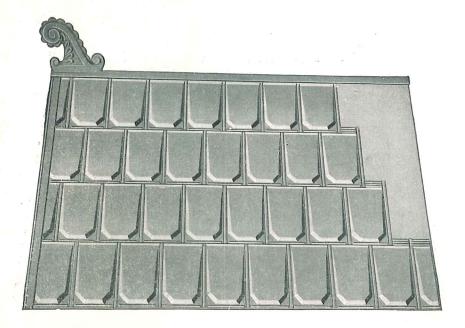


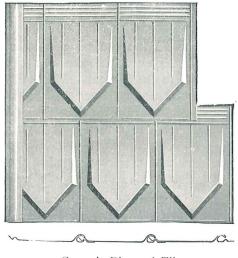
Walter's Octagon Tile.

Octagon Tile

What can be said of our Excelsior Tile can be applied to the Octagon. This Tile is constructed on the identical lines of the Excelsior Tile, and if diversity of style is wanted, these two designs can be worked together alternately, producing splendid effect.

Made in 7 x 10 size
" 10 x 14 "
300— 7 x 10 to the square
148—10 x 14 " "



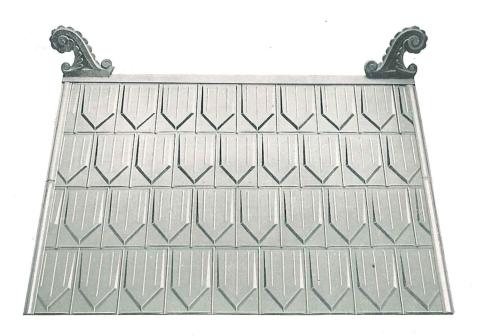


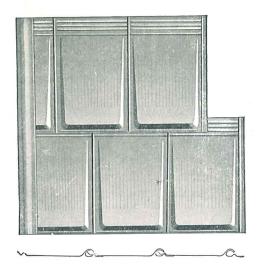
Cooper's Diamond Tile

Diamond Tile

This is a very decorative roof, particularly when combined with some one or more of our other designs. It blends perfectly with most forms of roof architecture, being especially suitable for use on turrets and corners of gables.

Made in 10 x 14 size 140-10 x 14 to the square





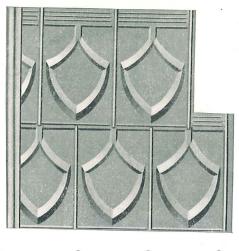
Cooper's Corinthian Tile.

Corinthian Tile

A peculiarly fine effect is produced with this designed Tile, as it has the fine, broad lines of the old Greek formation. When used on buildings modeled after the so-called "Colonial" style of architecture—with Corinthian columns—it carries out the effect desired as no other roof covering can. Especially recommended as it can be combined effectively.

Made in 10 x 14 size 140—10 x 14 to the square



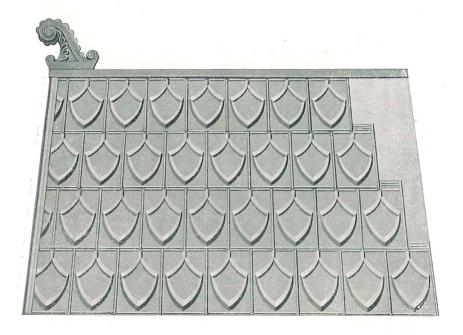


Cooper's Jersey Shingle.

Jersey Shingle

The shingle possesses all the good qualities of our Diamond and Corinthian tiles and is a happy medium between the two. Its lines are bold and graceful, and when grouped forms a roof covering hard to surpass for beauty of design. It is adapted to almost any form of roof covering, but particularly to roofs with dormers and gables.

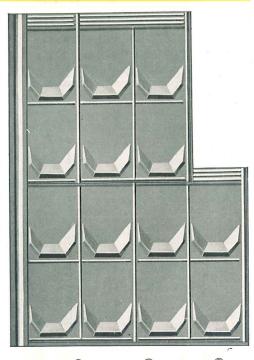
Made in 10 x 14 size 140—10 x 14 to the square

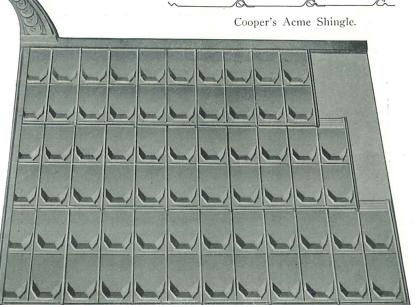


Acme Shingle

A standard form of shingle which makes a very attractive roof. This shingle is stamped from a sheet 14 x 20 inches and has a group of four shingles stamped in each sheet. The cost of this design is less than other designs. It is especially intended for large roofs, where an attractive design of roofing is desired.

Made in 14 x 20 size 64—14 x 20 to the square

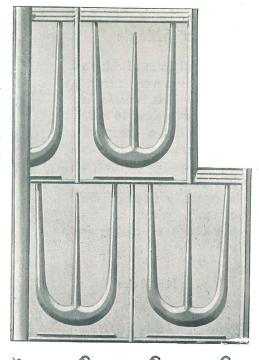




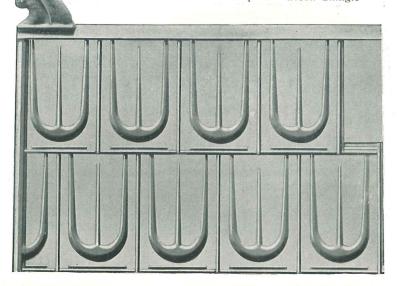
Hudson Shingle

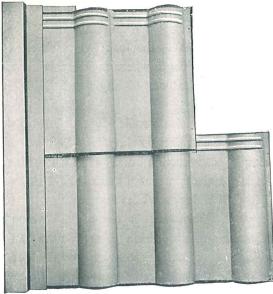
This is another popular design of shingle stamped from a 14×20 sheet, and adapted for use on plain or large roofs. The stamps shows one design to each 14×20 sheet, and is of a very bold and attractive pattern.

Made in 14 x 20 size 64—14 x 20 to the square



Cooper's Hudson Shingle





Cooper's Spanish Tile

Cooper's Spanish Tile

For full description and illustrations of Spanish Tile, Ridges, Hips, Finials, etc., see pages 54 to 60.

Made in 10 x 14 size 148—10 x 14 to the square



Walter's Patent Expansion Lock

The vital point of any metal Shingles is the lock by which they fasten together. This is the part of the Shingle where moisture is most likely to enter. The good or defective features of any metal Shingle depend to a great extent upon the lock.

The accompanying sketch is a full size profile of the Walter's



Patent Expansion Lock. This lock is of simple construction and represents the easiest and most secure manner of locking Metal Shingles and Tiles together.

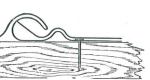
This lock is termed a covered or protected lock. At no time can any moisture enter any portion of this lock. The construction of the Walter's Lock requires more material

than used in any other lock, as every safeguard is used in the construction. Therefore, a larger number of shingles are packed to a square of the Walter's shingles than any other make.

Cooper's Patent Expansion Lock

The accompanying sketch is a profile of the Improved Cooper's Lock, which has proven very popular. We invite a comparison of





this lock with other locks of similar construction to the Improved Cooper's Lock. Note that this lock is formed in such a manner as to

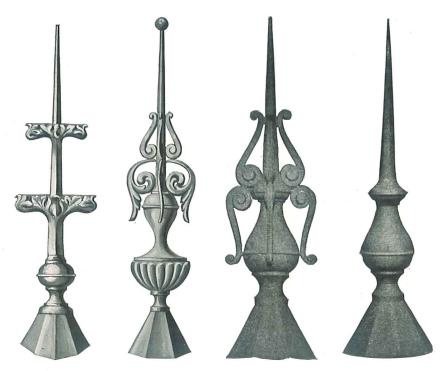
stand above the level or flat surface of the shingle. The hooks are turned over in a circle with a corrugation to the right forming a

concealed gutter and affording double protection.



Full size sectional view of upper end of shingle and overlapping shingle.

We provide full protection at the point where shingles lap. Note the four raised corrugations, and the close fitting of overlapping shingles. These corrugations are bold and deep and absolutely prevent rain or snow from beating under the shingles at this point.



No. 5721

Price, \$6.00

No. 5730 Height, 43 inches Height, 54 inches Price, \$12.00

No. 5735 Height, 31 inches Price, \$6.60

No. 5747 Height, 30 inches Price, \$3.60

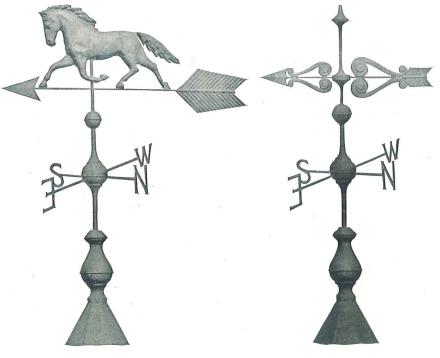
When ordering Finials and Vanes, do not fail to give size of base it is to fit over. It is better to send a sketch of base with sizes marked on same.

Advantages of Close Sheathing

All metal or slate roofing should be laid upon close sheathing, otherwise it is impossible for the roofing to support the weight of a man laying it, and it will bend out of shape or break. In high latitudes where we have driving storms of fine snow or "blizzards," we specify close sheathing covered by paper (using same rules as for laying slates). We will then guarantee a perfect roof.

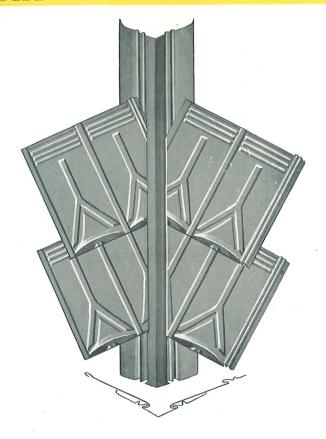
Copper Goods

We manufacture all sizes of Shingles, Tiles and Trimmings in 12, 14 or 16 ounce hard rolled copper, and will quote prices upon application.



No. 5711 Height, 52 inches Price, \$18.00

No. 5739 Height, 52 inches Price, \$14.00



Cooper's Patent Valley

The accompanying illustration shows our patent Valley, and how the connection is made between Valley and Shingle or flat Tile. This Valley has our Walter's Lock on each side. In connecting Shingle or Tile to same, cut the Shingle or Tile to the same mitre as Valley and allow about one-half inch so as to form a hook to lock on to Valley. We furnish to each customer a small pair of hand tongs which are handy to use in forming this hook, and for which no charge is made.

In laying this Valley, begin at the eaves of the roof and let the succeeding pieces overlapping the piece beneath by telescoping four inches. Note that the corrugations forming lock for Shingle are turned up vertically at ends of Valley pieces for the purpose of permitting the pieces to telescope. After telescoping, the lock should be turned back to

slanting position the same as center portion of sheet. This is done with the Valley tool we furnish free. With this lap an absolutely safe joint is made without the use of soldering. The Valley is nailed close to the outer edge about every twelve inches. This Valley must be laid before the Shingles are laid. The Shingle is then locked on to the folds or hooks nearest the center. **Do not hammer down the lock.**

Bullville, N. Y., September 17, 1921.

NATIONAL SHEET METAL ROOFING Co., Jersey City, N. J.

Gentlemen:—I have been using your shingles for over 25 years with the best of results. During this time, I have covered a number of public buildings, as well as many residences and barns. The shingles are lasting well, looking good, and my customers are well pleased with them.

Very truly yours,

D. H. HOWELL.



Illustration showing how to finish on a Hip Roof.

This hip is made plain and with a roll as shown and in one piece;



Plain Hip Finish.



Roll Hip Finish.



Gothic Hip Finish.

it forms an absolutely storm-proof finish. In laying the Shingles to the hip, cut them so as to project over about one inch and turn down and nail.

Our hip finish is then put on and nailed at point A. In putting this hip finish on, it is necessary to begin at top of roof and work down. We advise the use of this finish, as it facilitates the laying of the Shingles and makes a more substantial roof.



Climax Ridge.



Plain Ridge.

Ridge Coping

This is made in two designs: that is, with a roll and plain. This ridging must be put in place before the last course of Shingles is laid at top of roof. The top or last course of Shingles should then be laid and the Shingle inserted between the folds. This insures a perfect ridge finish without exposing any nails to the weather.



Gable Finish

The Gable Finish is used where an ornamental effect is desired at the gable end, otherwise it is not necessary that it be used in laying our Shingles and Tiles, as they can be turned down over the verge board about one inch and nailed. However, the Gable Finish will make a more ornamental finish and its cost is little.



Wall Flashing

See illustration on page 49.



Eave Bead

Many of our customers use the Eave Bead as a finish at the eaves of the roof. Its use is not essential. By permitting the lower end of shingles to extend beyond the eaves a finish equally as good for all practical purposes is ob'ained. It makes a more finished appearance, and if this is desired we advise its use.



Cooper's Patent Valley

See illustration on page 43



No. 2 Ridge Terminal Height, 15 inches Price, \$2.75



No. 1 Ridge Terminal Height, 12 inches Price, \$2.00



No. 946 Ridge Terminal Height, 12 inches Price, \$2.25



No. 335 Ridge Terminal Height, 15 inches Price, \$3.00

Finials and Stop Blocks

Many of our custmoers ask us for something in keeping with the ornamental character of a Walter's or Cooper's Roof to finish off the roof.

We submit a few designs of Finials and Ridge Terminals for this purpose.

The Finials are made with base to suit any size.

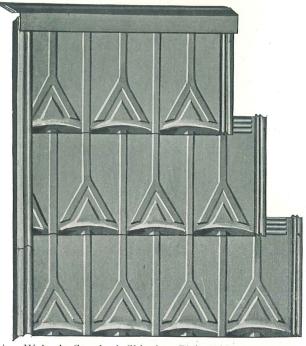
The Ridge Terminals are used in connection with our patent ridging.

Snow Guards

We recommend the Wire Snow Guard illustrated herewith for use with our Shingles. They are easily applied and very effective.

These Snow Guards are made from No. 8 Galvanized or Copper Wire.

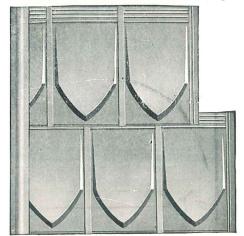
Directions for Laying Walter's and Cooper's Metallic Shingles



CUT I-Showing Walter's Standard Shingles. Plain Ride and Gable End Finish.

Commence at the lower left-hand corner. In starting be par-

ticular to see that you start straight with the eaves of the building. To do this it is best to draw a chalk line about thirteen inches from the eaves; this distance leaves one inch to project from the eaves, which in many cases is more than sufficient. If you use our Gable End Finish (Cut I) it saves the trouble of fitting the shingles to the verge board, and adds to the appearance of the roof. After nailing the Gable End Finish



Cut A-Excelsior Tile

to its place, press the left-hand edge of the first shingle well under the fold of the Gable End Finish, and before nailing it hook two or three shingles with the top edge on a line with your chalk line; then remove the loose shingles, and nail the first one which is held to its proper place by the Gable End Finish. By doing this in starting each

course you are sure of a straight line if you follow correctly the gauge lines at the top of

each shingle.

Should there be a gutter formed in the roof at the eave, let the shingle rest on it as you would in using the ordinary wood shingle. (Remember every other course commences with a half shingle, as shown in Cut A.) The same rules that govern the laying of slate or the common wood shingle along valleys, or about chimneys and dormer windows, are applicable to ours, except the tin shingles are bent up against the sides of chimneys, which cannot be done with wood or slate. When our shingles turn up against the sides of chimneys or brick

walls, insert flashing by sawing out the mortar joint above the line of tin work; where the upper edge of our shingles butts against the brick wall, as they do on

the lower side of chimneys,

cut them off on the line where the chimney comes to the roof, and use a strip of tin bent in this manner. (See Cut F.) The upper end at A is to fit in mortar joint. The lower edge, B,

Cut F.

(See Cut F.) The upper end at A is to fit in mortar joint. The lower edge, B, is nailed to the sheathing before the shingles are put on. The upper ends of shingles are then to be pressed up under the fold, C. Great care should be used in finishing about chimneys and dormers, the details of which cannot well be explained to suit each case; but a work-

It is much easier to secure this result with the use of our shingles

man of ordinary skill can suggest the proper manner in which the

work should be done to secure thoroughly tight work.

than it is with either wood or slate.



Pine Meadow, Conn., September 27, 1921.

NATIONAL SHEET METAL ROOFING Co.,
Jersey City, N. J.

Gentlemen:—Thirteen years ago we ordered something over 130 squares of your Walter's Genuine Re-dipped Galvanized Tin Shingles and the accessories that go with same. These shingles were used on our Timber Sheds and Manufacturing Plants here at Pine Meadow. We liked this Roofing so well that we were determined to secure the Agency for the sale of the goods in this section. During the past 12 years we have sold a great many of your galvanized shingles in this section and these shingles at all times have given good satisfaction to our customers. We have had some competition from a cheaper galvanized shingle. These shingles seemed to be stamped from a sheet that was first galvanized, and then stamped. Many of these cheaper shingles have rusted so badly that it has become necessary to paint them.

The frequency of our orders for Walter's Genuine Re-dipped Galvanized Tin Shingls would be convincing evidence of the high opinion that we have of your Roofing in this section. We have found that the use of your Galvanized Shingles materially reduces the Fire Insurance Rate on both building and contents of building.

Very truly yours,

CHAPIN STEPHENS COMPANY.

Edmeston, N. Y., September 15, 1921.

NATIONAL SHEET METAL ROOFING Co., Jersey City, N. J.

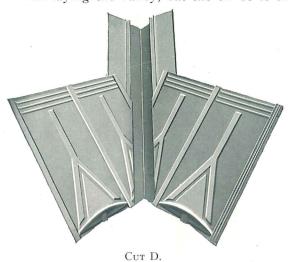
Gentlemen:—Thirty-five years ago I covered my residence and barn with Walter's Galvanized Re-dipped Tin Shingles. These roofs have given me no trouble since and to all appearances are as good today as when put on.

Very truly yours.

ADDIE D. LUCAS.

Where the upper end of shingle butts against the side of a frame house, use the same means as on the lower side of chimneys, only let there be no bend at the point A, as shown in Cut F; but let it extend an inch or so up under the weather boarding. Where the weather boarding is vertical there is no way of making tight work but to put the tin work as before described, back of the vertical weather board.

In laying the valley, cut the tin so it extends to about one-half



inch over the lock, and bend it under, as shown in Cut D, and in cut on page 43. We furnish to each customer a small pair of hand-tongs, which are handy to turn this edge over and pinch it together after the shingle is laid.

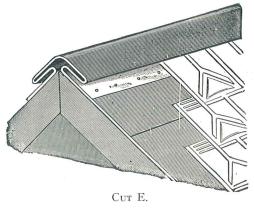
The Cut D represents the shingles laid to and from the valley. In starting from the valley it is best to hold several shingles together, or tack them at the top, then with a straight-

edge mark and cut where they overlap the valley; and with the hand-tongs edge and lock them to the valley, as shown in Cut D.

Use the Plain Ridge Coping by nailing the edges to the roof

boards, and press the shingle up under the folds on each side after they are cut to suit the ridge or angle of the hip. (See Cut E.)

As plain as this appears, we have known men to nail the Plain Ridge Coping through the folds and on the top of the shingles. We are, therefore, particular to say wherever this Plain Ridge Coping is used it should be



nailed to the roof boards before the shingles are put on. The fold is

made expressly to receive the edge of the shingles. Cut E shows this coping and the manner of applying it.

We desire to impress upon our customers, who live in the Northern States, where blizzards and severe snowstorms are frequent, the necessity of using close sheathing, and if the sheathing is not close, the use of sheathing paper, to be laid underneath the shingles; it adds greatly to the warmth of the house in winter, and prevents small particles of snow from entering; it costs but little, and should always be used under wood, slate or tin shingles where the best protection is desired.

Do not hammer down the joints or lock.

Measurements

By one square of our roofing we mean a sufficient quantity to cover a space measuring ten by ten feet or 100 square feet. The term SQUARE is the roofer's measurement of the quantity required to cover the above-mentioned surface and a roof is spoken of as containing so many squares. In one square of our goods is a sufficient amount of material to cover one hundred square feet after being laid on the roof, we making all allowances for laps. Our Roofing sundries, such as ridges, valleys, etc., are sold in the same manner, we making the allowances for laps and furnishing a sufficient amount to cover the lineal feet ordered, after the same is laid on the roof.

We shall take pleasure in answering fully any inquiries, and give aid to those who are not experts in roofing. Samples of any of our goods sent prepaid when desired to determine selection. We are prepared to demonstrate our claim that we make the BEST goods in this line in the world.

Consult us before definitely placing your order for new roofing material. We can save you money, time and worry.





Nails

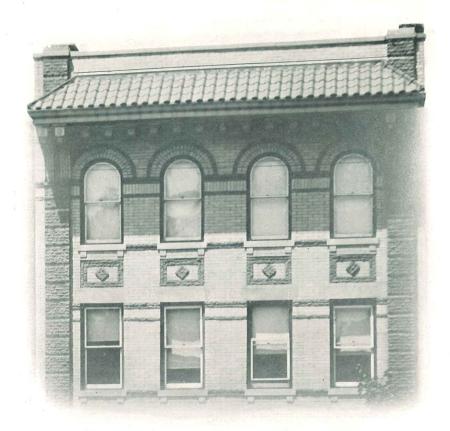
We advise the use of a galvanized or tinned barbed-wire nail in putting our Shingles on. Such nails are sold at only a small advance over the common uncoated steel nail.

The question of cost of nails is a very small one, and for the slight additional cost, we advise that you use a nail that will be of the same lasting quality as our roofing.

Paint

We recommend that our painted tin Shingles be given a second coat of paint as soon as convenient after being put on the roof.

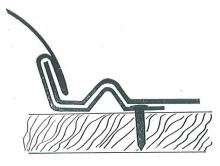
We can furnish customers our "National Paint" in 1 and 5 gallon cans, in either light red or slate color. The National Red paint is a mixture of the best oxide of iron and pure linseed oil.



Cooper's Spanish Tile

This "The Most Beautiful Roof in the World," is a relic of those artistic people, the Moors, who left this addition to fine architecture on their withdrawal from Spain. Descended to us through the Franciscan Monks of California, it ranks as one of our best forms of roof beauty. We have faithfully reproduced it in metal, doing away with the heavy clay without detracting from the beauty or wearing quality. Decidedly the finest roof for many forms of buildings. Will add many per cent. to the attractiveness of any house.

The accompanying sketch illustrates the patent lock used on our Spanish tile. The high point of this lock extends much higher than the lock used on any other make of Metal Spanish tile. In comparison with other locks, our lock stands above the top side of the tile, while on all other makes, the lock is on the under side. This



permits moisture to enter the lock. No water can possibly enter our lock. It does freely in other makes, and as more or less dust and dirt accumulates in such locks, the moisture is held for a considerable time, and rust and decay is accelerated at that point.



Connecting Corridor at ninth story of Post Graduate Hospital, New York City.

Fifty-eight squares 16-oz. Copper tiles used on Corridors.

McKim, Mead & White, Architects.

Quality and Finish

We invite you to examine the finish and workmanship of our Spanish tiles. If full size samples are desired, we shall be pleased to forward samples on request.

Materials

Our Spanish tile are made in four qualities of material, namely: painted tin, galvanized re-dipped tin, zinc and copper. For our painted tin, we use IC full weight perfect roofing tin. The painted tin Spanish tile are painted one coat on each side with Prince's Metallic and pure linseed oil, with sufficient dryer to dry in forty-eight hours' open air exposure. Our galvanized Spanish tile are stamped from the same material—IC full weight perfect roofing tin—and are galvanized after all stamping and embossing is done. The process is to dip the tile one at a time in open kettles of molten zinc, and to permit all of the zinc to adhere to the tile that will do so. By following this process, there are absolutely no cracks or abrasions of the zinc coating from working through dies. These goods carry an exceptionally heavy coating of zinc, and will stand for years without the protection of paint, and show no signs of rust. We also stamp our Spanish tile from 12-, 14- and 16-oz. cold rolled copper and No. 9 sheet zinc.

Ridge Finish

By using our Ridge finish you secure an artistic finish to the roof harmonizing with the Tile. We also manufacture Ridge Terminals, or Finials for finishing at a Gable Ridge or at the junction of Hip and Ridge. Also terminal for finishing at junction of four Hips which you will find illustrated herewith.



No. 1 Large Ridge Finish

Girt 20" Height 8" Length 28"

Covering capacity 25"

No. 7 Small Ridge Finish

Girt 14" Height 5" Length 28"

Covering capacity 25"

Hip Finish

The following cut illustrates our Tile Hip Finish. As the mitres at the hips of the roof vary, we stamp this Hip finish with a flange at sides of sufficient width to allow it to be cut so as to fit down snugly over the tile. As all hips vary this must be done by the workman at the time of putting tile on the roof. This fitting is done after the field tile are laid. Cut 14 shows the finish of our Hip at eave of roof and is called Hip starter.



No. 2 Large Hip Finish

Girt 20" Height 8" Length 28"

Covering capacity 211/2"

No. 8 Small Hip Finish

Girt 14" Height 5" Length 28"

Covering capacity 25"

Crown Mould

For finishing at top of mansard roof with flat deck roof on building this finish enables you to secure the tile effect in finishing such a roof. Cut 10 shows a profile of the crown mould. Note that upper side is made so as to permit same to be attached to a tin or composition roof.



Wall Flashing

In finishing our Spanish Tile Roofing to the walls of building when used for covering porches, mansards or as a cornice roof, you will find this finish a great saving in labor and at the same time assuring a perfect finish. This flashing turns up against the wall six inches and must be cap flashed.



No. 9

Girt 14" Length 28" Covering capacity 17"



This cut shows the manner of finishing our Spanish tile to a valley. Use our Cooper's valley, 20 inch width. The tile must be cut to the mitre of the valley and headers soldered in



No. 3 Large Finial for Ridge Finish Height 16"

No. 11 Small Finial for Ridge Finish Height 16"



No. 4 Large Finial for Two Hip and Ridge Finish Height 16"

No. 12 Small Finial for Two Hip and Ridge Finish Height 12"



The use of these terminals are advised for the finish to the ridge at Gables or at junction of Ridge and Hips or at junction of four Hips. These terminals are made so that they fit snugly and add a great deal to the ornamental appearance of the building covered with our Spanish Tile.

No. 5 Large Finial for Four Hip Finish Height 16"

No. 13 Small Finial for Four Hip Finish Height 16"

Starting Tile

As it is necessary to have the raised portion or ends of tile closed at the eaves, to make a perfect finish to eaves, we make an end piece for closing the tiles used at the eaves. Such tiles are called starters. Always advise us as to the number of lineal feet of eave starters required in the building to be covered.

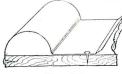


No. 6 Large Hip Starters Size 15" long 10" wide

No. 14 Small Hip Starters Size 15" long 8" wide

Hip Starters

The accompanying cut illustrates our finish for Hips at eaves of roof. This Hip starter enables you to make a very artistic finish at the eaves and adds materially to the appearance of the building.



No. 15

Finish to Gable

This Gable should be placed on the roof before starting to lay tile. Measurements should then be taken of the distance between the two, and the laying of the field tile be so

spaced that the margin on sides next to gable will be equal.

This Gable finish is made so as to allow for give or take.

Directions for Laying

In laying Spanish tile on the roof care should be taken to run the courses straight; this applies to both horizontal and perpendicular lines. This can readily be done with a chalk line, and will insure true lines. These squares must be true. All horizontal lines running at a right angle to the perpendicular lines, and true with the eave line of the roof.

Begin at the left side of roof and work to right. Nailing flange is on right side and two nails should be driven through it to hold tile to roof, one about three inches from bottom and one near top end. In finishing to valley or gable finish, connection should be made by soldering same. It is not necessary to solder a solid seam. Heavily tacked

every three inches should answer all requirements. This also applies to ridge, hip finish, etc. The tile should lap over the lowest corrugation at top of tile beneath same.

In finishing to valley, cut tile to the same mitre line as valley and solder in headers.

We advise the use of water proof paper beneath tile.



SPANISH TILE			Weight per Square. Boxed
Painted Tin Goods		Telegraph Cipher	ready for shipment
Cooper's Spanish Tile	\$8.00 .17 .17 3.35 3.35 3.35 .80 .15 .15 3.35 3.35 3.35 3.35 3.15 .80 .15 .15	Spantin Spanrid Spanhi Spanfi Spanfin Spanfinial Spanstart Spanridge Spanhip Smalfi Smalfinial Smalstar Spanflash Spancrow Spanadams	115
	.10	Spangab	
	.10	Telegraph	Weight per Square, Boxed ready for
Re-dipped Galvanized Tin Goods			per Square. Boxed
Re-dipped Galvanized Tin Goods Galvanized after Stamping Cooper's Spanish Tile	10.00 .20 .20 3.35	Telegraph Cipher Galspan Galrid Galhi Galfi	per Square, Boxed ready for shipment

Subject to change without notice.

Eave Starting Tile, 3c. per lineal foot extra. (No discount.)

Price on Copper and Zinc Tile furnished on application.

PRICE LIST.

Terms

Our terms are cash unless otherwise agreed upon, and all bills are payable by Draft on New York, Post Office Order, or money can be sent by Express. No allowance will be made for Exchange or Express Charges.

All accounts are subject to draft without notice when due.

Persons who are not rated in the Commercial Agency Books should send references along with order to save delay. We will ship goods C. O. D. upon receiving a remittance to cover freight charges to and from destination.

Our Shingles and Tiles are packed in boxes, each containing a sufficient quantity of material to cover one hundred square feet after being laid on the roof, if laid according to our directions.

Copper and Zinc Goods

Our Shingles and Tiles are manufactured in hard rolled copper and zinc. Prices on copper and zinc goods will be quoted upon application.

Painted Tin Goods	9	Telegraph Cipher	per Square. Boxed ready for shipment
Walter's Standard Shingles, 7x10 inPer Square,	\$6.00	James	87
" " " 10x14 " "	5.50	William	84
" " " 14x20 " "	5.25	Roman	82
Walter's 7x10 in., Excelsior Tile "	6.25	Extin	87
" 10x14 " " " "	5 7 5	Exceltin	84
Walter's 7x10 in., Octagon Tile "	6.25	Octin	87
" 10x14 " " " "	5.75	Octagtin	84
Cooper's Diamond Shingle, 10x14 in "	5.15	Diamtin	80
" Corinthian " 10x14 " "	5.15	Cortin	80
Jersey " 10x14 " "	5.15	Jertin	80
Acme 14x20	4.90	Actin	78
Hudson 14x20	4.90	Hudtin	78
Plain HipPer foot,	.06	Pliptin	
Roll Hip	.08	Roliptin	
Gothic Hip	.08	Gothtin	
Wali Flasilling	.07	Flashtin	
Climax Ridge Coping" "Blain Ridge Coping" "	.11	Ohio	
ram Kidge Coping	.08	Charles	
Gable Elid Fillish	.03	Chicago	
valiey, 14 men	.08	Westlake	
valley, 20 mcn	.11	Adams	
Eave Bead"	.03	Catharine	

Re-dipped Galvanized Tin Goods Galvanized after Stamping Telegraph Cipher	Weight per Square. Boxed ready for shipment
Walter's Standard Shingles, 7x10 in., Per Square, \$7.50 Maine	99
" " 10x14 " " 6.87 Iowa	97
" " 14x20 " " 6.25 Kansas	94
Walter's 7x10 in., Excelsior Tile " 8.00 Galex	99
" 10x14 " " " " 7.25 Galexcel	97
Walter's 7x10 in., Octgaon Tile " 8.00 Galoc	99
" 10x14 " " " " 7.25 Galoctog	97
Cooper's Diamond Shingle, 10x14 in., " 6.40 Galdiam	93
" Corinthian " 10x14 " " 6.40 Galcortin	93
" Jersey " 10x14 " " 6.40 Galjer	93
" Acme " 14x20 " " 5.85 Galacme	89
filldsen 14x20 5.65 Gamud	
Plain Hip	
Holl Hip	
Gothic Hip	
The state of the s	
Cimital Image coping	
Plain Ridge Coping	
Valley, 14 inch	
Valley, 20 inch	
Eave Bead " .04 Helen	
Lave Dead	
Roofing Sundries	Telegraph Cipher
Steel Barbed Wire Nails, 34 inchPer lb., 6c. Net.	Alvin
" " " " 6c. "	Franklin
" " " 1 " " 6c. "	Jacob
" " " " 1¼ " " 5c. "	Fulton
" " " 1½ " " 5c. "	Hackett
2 5c.	Hammond
If Galvanized nails are desired, same can be furnished at an advance of 2 cents per pound over the above prices.	Galvanized
National Paint in red or slate color 1 gallon cansper gallon, \$1.25 Net	Paint
5 " " " 100 "	"
Tinners Snipsper pair. 1.50 "	Tinner
Sheathing Paper. 1X Waterproofper square, .30 "	Water
Sheathing Paper, 2X Waterproof	Proof
Single Ply Asphaltic Felt " .35 "	Felt
Snow Guards, Galvanized Wireper 100, 1.50 "	Galwir
Snow Guards, Copper Wire " 3.00 "	Copwir

SUBJECT TO CHANGE WITHOUT NOTICE.

